

In the specification:

Delete paragraphs 1 and 2 and replace with the following:

Please amend the application as set forth below in the following paragraph.

This present application is a continuation in part of U.S. Patent Application Serial Number 10/687,502, filed on October 15, 2003, entitled: Improved Conical Trocar Seal. Which claims the benefit of U.S. Provisional Application Serial Number 60/456,386, filed on March 21, 2003, entitled: Improved Trocar Seal.

Delete paragraph 0018, and amend paragraph 0019 to read as follows:

Figure 6 is a cross-sectional view of trocar 100 shown in Figure 1, taken along line 7-7 and having the obturator 110 removed for clarity.

Delete paragraph 22 and replace with the following:

As seen from Figure 6, a preferred embodiment of the present invention is a trocar 100 for performing a procedure on a patient. Trocar 100 includes a hollow cannula 202 having a distal end 204 and a proximal end 206. Trocar 100 also includes a housing 210 having a distal end 212 attached to the proximal end 206 of the cannula 202 and a proximal end 214 having a wall 216 attached thereto, the wall having an aperture 218 extending therethrough. Trocar 100 includes a seal assembly 2 disposed within the housing comprising a plurality of layered elastomeric members 4a-4d forming conical shape seal 5. As described below, the plurality of layered elastomeric members 4a-4d preferably have a semi-circular profile, and preferably having a circumference of about 180 to 270 degrees. As described below, the seal assembly preferably includes a first and second rigid rings (gasket retainer ring 8 and gasket ring 20) wherein the layered elastomeric members 4a-4d are disposed between and are abutting against the rings 8 and 20. As described below, the elastomeric members 4a-4d preferably include a proximal flange portion 70, and an inwardly extending portion 72 extending distally therefrom, wherein the proximal flange portions are disposed between and are abutting against the rings. Preferably, the seal assembly 2 has an outer perimeter 220 which is attached to a flotation means 80. As will be described in greater detail below, seal assembly 2 preferably includes a plurality of protectors 40

disposed proximal to the elastomeric seal. Lastly, trocar 100 preferably includes a zero closure valve shown in Figure 6 as a duck bill valve 230.

Please delete paragraph 27 and replace with the following:

When assembled as seal assembly 2, the protectors are layered together as described above, and the seal segments are layered together as described below. As is better seen by referring to figure 3, gasket pins 10 go through holes 6 in seal segments 4, and snap into gasket pin holes 26, and gasket pins 29 snap into holes 14 on retainer ring 8 to secure gasket ring 20 to gasket retainer ring 8 together, with the seal segments disposed therebetween. Crown pins 32 go through holes 42 on protectors 40 and snap into crown holes 28 to help secure gasket ring 20 to crown 30 with protectors 40 disposed therebetween. When all assembled, it forms seal assembly 2 (shown in Figure 6).

Delete paragraph 34 and replace with the following:

The benefit of seal assembly 2 of the present invention is an increase in the ability to insert a surgical instrument, like a surgical stapler or clip applier, with a larger range of instrument shaft diameters into a trocar of the type described above as item 100. The herein described seal eliminates the classical issue of "hoop-stress" associated with lip seals. By breaking the seal into multiple segments, the strain in the system can be greatly reduced during instrument insertion. In the case of a seal that must seal on both 5 mm instruments as well as 12 mm instruments, this reduction in strain is believed to be as much as 75%. This yields much lower peak instrument insertion forces, instrument insertion drag forces, instrument extraction drag forces, and instrument peak extraction forces. The reduction in strain allows the seal to resist puncture during insertion of sharp instruments better than lip seals. When a sharp instrument contacts the seal, the increase in strain does not occur as rapidly as in lip seals. This allows the instrument to pass by prior to critical strain levels being reached, resulting in a puncture or tear.

Please delete paragraph 37 and replace with the following:

Preferably, the seal assembly can be mounted onto the trocar through a flotation means or system such as a bellows. Such seal flotation systems are described in U.S.